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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/768,629	01/29/2004	Karla Weaver	10123/00901	6763
7590 08/21/2009 Patrick J. Fay, Esq.			EXAMINER	
FAY KAPLUN & MARCIN, LLP			SCHMIDT, EMILY LOUISE	
Suite 702 150 Broadway			ART UNIT	PAPER NUMBER
New York, NY 10038			3767	
			MAIL DATE	DELIVERY MODE
			08/21/2000	DADED

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/768,629 WEAVER ET AL. Office Action Summary

Office Action Summary	Examiner	Art Unit	
	Emily Schmidt	3767	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence ad	ldress
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D Extensions of time may be available under the prosisons of 37 CR 11 after SIX (6) MONTHS from the making date of this communication. If NO period for reply is specified above, the maximum statutory pends Faller or population of the property	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	N. nely filed the mailing date of this o D (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 19 J	une 2009.		
2a) This action is FINAL. 2b) ☐ This	s action is non-final.		
3) Since this application is in condition for allowa	nce except for formal matters, pro	secution as to the	e merits is
closed in accordance with the practice under I	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-7 is/are pending in the application.			
4a) Of the above claim(s) is/are withdra	wn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-7</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	or election requirement.		
Application Papers			
9) The specification is objected to by the Examine	er.		
10) The drawing(s) filed on is/are: a) acc	epted or b) objected to by the I	Examiner.	
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is obj	ected to. See 37 C	FR 1.121(d).
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form P	ГО-152.
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreigr a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	ı-(d) or (f).	
<ol> <li>Certified copies of the priority document</li> </ol>	s have been received.		
<ol><li>Certified copies of the priority document</li></ol>	s have been received in Applicati	on No	
<ol> <li>Copies of the certified copies of the prio application from the International Burea</li> </ol>	•	ed in this National	Stage
* See the attached detailed Office action for a list		d.	
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)	

Attachment(s)		
1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patient Drawing Review (PTO-948) Information Disclessure Statement(s) (PTO/SE/02) Paper No(s)/Mail Date	4) Interview Summary (PTO-413) Paper No(s)Mail Date. 5) Notice of Informal Patent Application 6) Other:	
S. Rotent and Trademark Office		

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#### DETAILED ACTION

#### Continued Examination Under 37 CFR 1.114

 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 June 2009 has been entered.

#### Claim Objections

 Claim 4 is objected to because of the following informalities: "base membrane" is believed to be "base member" so as to be consistent with claim 2. Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The seating portion which covers a minority of the surface area of the lumen

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occluding portion in which the slit is disclosed as recited in the claims contains matter new to the application. Nowhere does the specification relate that the seating portion covers a minority of the surface area of the lumen occluding portion.

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term minority has not been sufficiently defined. For purposes of examination, the term minority is taken to mean less than fifty percent.

#### Claim Rejections - 35 USC § 102

 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Moorehead et al. (US 5.984.902).

With regard to claim 1, Moorehead teaches a pressure activated valve (Fig. 3) for medical applications comprising: a housing having a lumen extending therethrough from a proximal end to a distal end thereof (Figs. 3 and 7 housing 112); and a flow control membrane extending across the lumen to control flow therethrough (Figs. 3 and 7 member 128), the flow control membrane including a seating portion at which the flow control membrane is coupled to the

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housing (Fig. 3 the seating portion is taken to be that generally corresponding to 119 and 124) and a lumen occluding portion having a slit (Figs. 3 and 7 see slit 129) extending therethrough so that, when the lumen occluding portion is subjected to a pressure of at least a predetermined threshold level, the lumen occluding portion moves from a closed configuration in which flow through the lumen is prevented to an open configuration in which flow is permitted (Figs. 11-13, Col. 11 lines 12-41), wherein the seating portion covers a minority of a surface area of the lumen occluding portion in which the slit is disposed (Fig. 3).

With regard to claim 2, Moorehead teaches a flow control membrane composed of a first membrane (Figs. 3 and 7 element 128) and can further comprise an annular base member (Figs. 3 and 7 element 124) wherein an area of the base member substantially corresponds to that of the seating portion and wherein the slit extends through the first membrane (Fig. 3). The thickness of the flow control membrane at the seating portion, as comprised of the first membrane and the annular base member, is greater than the thickness of the lumen occluding portion (Fig. 3).

With regards to claim 3, Moorehead teaches a membrane retention portion of the housing, the membrane retention portion being adapted to apply a retentive compression force to mounting portion (Fig. 3 generally indicated at 116, Col. 10 lines 2-4).

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
  obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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 Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moorehead (US 5,984,902).

With regard to claims 2 and 4, Moorehead teaches a flow control membrane composed of a first membrane (Figs. 3 and 7 element 128) and can further comprise an annular base member (Figs. 3 and 7 element 124) wherein an area of the base member substantially corresponds to that of the seating portion and wherein the slit extends through the first membrane (Fig. 3). The thickness of the flow control membrane at the seating portion, as comprised of the first membrane and the annular base member, is greater than the thickness of the lumen occluding portion (Fig. 3). Moorehead does not explicitly disclose the first membrane and base member are adhesively bonded. However, Moorehead does teach that member 124 can be retained effectively using adhesion (Col. 10 lines 11-12). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to bond the first membrane and annular base member with adhesive because Moorhead teaches that adhesive is suitable for use for retention and it is an art recognized effective way of securing two things together so as to maintain them in a desired position.

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moorehead
 (US 5,984,902) as applied to claims 1 and 2 above, and further in view of Fischer et al. (U.S. Patent 5,944,698).

With regard to claims 5 and 6, Moorehead teaches a pressure activated valve substantially as claimed. Moorehead differs from claims 5 and 6 in that it does not disclose specific thickness range for the membrane, though it does disclose that thickness variables are determined based on

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the pressure that will be experienced (Col. 7 lines 30-34). However, Fischer et al. teaches a membrane with a slit that opens due to fluid pressure as a result of a plunger being inserted into a syringe barrel (Fig. 3 elements 50, 52, Col. 6 lines 6-9) and that the membrane has a preferred thickness of about .01 inches to .05 inches (Col. 6 line 5). It would have been obvious to one of ordinary skill in the art to use a first membrane with a thickness of .01- .035 inches as in claim 5 or between .01 and .05 inches as in claim 6 in the device of Moorehead as such is an art recognized membrane thickness range as exemplified in the teachings of Fischer et al.

Moreover, the membrane thickness range is taken to be a result effective variable routinely optimized to correspond to the pressure the membrane will be exposed to.

With regard to claim 7, Moorehead teaches a pressure activated valve substantially as claimed. Moorehead differs from claim 7 in that it does not teach the thickness of the mounting portion to be between 1 and 20 times the thickness of the lumen occluding portion. However, Fischer et al. teaches a preferred membrane thickness of about .01 to .05 inches (Col. 6 line 5). It would have been obvious to a person of ordinary skill in the art to apply the thickness range suggested in Fischer et al. to the first membrane and base member (Figs. 3 and 7 elements 128, 124) in Moorehead as applied to claims 5 and 6. It directly follows that the thickness of the seatting portion will be between 1 and 20 times the thickness of the lumen occluding portion.

#### Response to Amendment

The amendments filed on June 01, 2009 have been entered.

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### Response to Arguments

13. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. The amendments to the claims overcome the objections to claim 2 and further rejections under 35 U.S.C. 112 second paragraph regarding language previously found in the claims reciting "...the thickness of the seating portion is greater than a thickness of the lumen occluding portion. The rejections under 35 U.S.C. 112 regarding the recitation of the minority portion are maintained. The drawings and disclosure do not sufficiently encompass the recitation that the seating portion covers a minority of a surface area of the lumen occluding portion. Though the specification discloses the seating portion to be at the periphery there is no supporting disclosure as to the size or span of the area of the periphery. Lacking further definition the periphery of a device could encompass the majority or minority of a surface area.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Schmidt whose telephone number is (571) 270-3648. The examiner can normally be reached on Monday through Thursday 7:30 AM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Emily Schmidt/ Examiner, Art Unit 3767 /Kevin C. Sirmons/

Supervisory Patent Examiner, Art Unit 3767